



IFWO

RAW SEQUENCE LISTING

DATE: 08/30/2004

PATENT APPLICATION: US/10/773,530

TIME: 14:57:32

Input Set : N:\Crf3\RULE60\10773530.raw.txt

Output Set: N:\CRF4\08302004\J773530.raw

1 <110> APPLICANT: Cox III, George N
 2 Bolder Biotechnology, Inc.
 3 <120> TITLE OF INVENTION: Derivatives of Growth Hormone and Related Proteins
 4 <130> FILE REFERENCE: 4152-1-PUS
 5 <140> CURRENT APPLICATION NUMBER: US/10/773,530
 6 <141> CURRENT FILING DATE: 2004-02-05
 7 <150> PRIOR APPLICATION NUMBER: US/10/400,377
 8 <151> PRIOR FILING DATE: 2003-03-26
 9 <150> PRIOR APPLICATION NUMBER: US/09/462,941
 10 <151> PRIOR FILING DATE: 2000-01-14
 11 <150> PRIOR APPLICATION NUMBER: 60/052,516
 12 <151> PRIOR FILING DATE: 1997-07-14
 13 <160> NUMBER OF SEQ ID NOS: 41
 14 <170> SOFTWARE: PatentIn Ver. 2.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 191
 18 <212> TYPE: PRT
 19 <213> ORGANISM: Homo sapiens
 20 <400> SEQUENCE: 1
 21 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg
 22 1 5 10 15
 23 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu
 24 20 25 30
 25 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro
 26 35 40 45
 27 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg
 28 50 55 60
 29 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu
 30 65 70 75 80
 31 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val
 32 85 90 95
 33 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp
 34 100 105 110
 35 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu
 36 115 120 125
 37 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser
 38 130 135 140
 39 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr
 40 145 150 155 160
 41 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe
 42 165 170 175
 43 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
 44 180 185 190

ENTERED

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46 <210> SEQ ID NO: 2
47 <211> LENGTH: 166
48 <212> TYPE: PRT
49 <213> ORGANISM: Homo sapiens
50 <400> SEQUENCE: 2
51   Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu
52     1             5             10             15
53   Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His
54             20             25             30
55   Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe
56             35             40             45
57   Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp
58     50             55             60
59   Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu
60     65             70             75             80
61   Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp
62             85             90             95
63   Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu
64             100            105            110
65   Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala
66             115            120            125
67   Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val
68             130            135            140
69   Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala
70     145            150            155            160
71   Cys Arg Thr Gly Asp Arg
72             165

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74 <210> SEQ ID NO: 3
75 <211> LENGTH: 165
76 <212> TYPE: PRT
77 <213> ORGANISM: Homo sapiens
78 <400> SEQUENCE: 3
79   Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
80     1             5             10             15
81   Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
82             20             25             30
83   Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
84             35             40             45
85   Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
86     50             55             60
87   Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
88     65             70             75             80
89   Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
90             85             90             95
91   Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
92             100            105            110
93   Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
94             115            120            125
95   Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg

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96          130          135          140
97      Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
98      145          150          155          160
99      Leu Arg Ser Lys Glu
100          165
102 <210> SEQ ID NO: 4
103 <211> LENGTH: 166
104 <212> TYPE: PRT
105 <213> ORGANISM: Homo sapiens
106 <400> SEQUENCE: 4
107      Cys Asp Leu Pro Glu Thr His Ser Leu Asp Asn Arg Arg Thr Leu Met
108      1          5          10          15
109      Leu Leu Ala Gln Met Ser Arg Ile Ser Pro Ser Ser Cys Leu Met Asp
110          20          25          30
111      Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln Phe
112          35          40          45
113      Gln Lys Ala Pro Ala Ile Ser Val Leu His Glu Leu Ile Gln Gln Ile
114          50          55          60
115      Phe Asn Leu Phe Thr Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Asp
116          65          70          75          80
117      Leu Leu Asp Lys Phe Cys Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu
118          85          90          95
119      Glu Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met
120          100          105          110
121      Asn Ala Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr
122          115          120          125
123      Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val
124          130          135          140
125      Arg Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu
126          145          150          155          160
127      Arg Leu Arg Arg Lys Glu
128          165
130 <210> SEQ ID NO: 5
131 <211> LENGTH: 166
132 <212> TYPE: PRT
133 <213> ORGANISM: Homo sapiens
134 <400> SEQUENCE: 5
135      Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
136      1          5          10          15
137      Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
138          20          25          30
139      Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
140          35          40          45
141      Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
142          50          55          60
143      Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
144          65          70          75          80
145      Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
146          85          90          95

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147      His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
148              100                      105                      110
149      Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
150              115                      120                      125
151      Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
152              130                      135                      140
153      Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
154              145                      150                      155                      160
155      Thr Gly Tyr Leu Arg Asn
156              165

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158 <210> SEQ ID NO: 6

159 <211> LENGTH: 174

160 <212> TYPE: PRT

161 <213> ORGANISM: Homo sapiens

162 <400> SEQUENCE: 6

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163      Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys
164              1              5              10              15
165      Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
166              20              25              30
167      Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val
168              35              40              45
169      Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys
170              50              55              60
171      Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser
172              65              70              75              80
173      Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile Ser
174              85              90              95
175      Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala Asp
176              100              105              110
177      Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala Pro
178              115              120              125
179      Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala Phe
180              130              135              140
181      Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser Phe
182              145              150              155              160
183      Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
184              165              170

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186 <210> SEQ ID NO: 7

187 <211> LENGTH: 332

188 <212> TYPE: PRT

189 <213> ORGANISM: Homo sapiens

190 <400> SEQUENCE: 7

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191      Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
192              1              5              10              15
193      Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
194              20              25              30
195      His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
196              35              40              45
197      Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu

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198          50          55          60
199 Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
200      65          70          75          80
201 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
202          85          90          95
203 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
204          100          105          110
205 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
206          115          120          125
207 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
208          130          135          140
209 Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
210          145          150          155          160
211 Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu Pro Asn
212          165          170          175
213 Arg Thr Ser Gly Leu Leu Glu Thr Asn Phe Thr Ala Ser Ala Arg Thr
214          180          185          190
215 Thr Gly Ser Gly Leu Leu Lys Trp Gln Gln Gly Phe Arg Ala Lys Ile
216          195          200          205
217 Pro Gly Leu Leu Asn Gln Thr Ser Arg Ser Leu Asp Gln Ile Pro Gly
218          210          215          220
219 Tyr Leu Asn Arg Ile His Glu Leu Leu Asn Gly Thr Arg Gly Leu Phe
220          225          230          235          240
221 Pro Gly Pro Ser Arg Arg Thr Leu Gly Ala Pro Asp Ile Ser Ser Gly
222          245          250          255
223 Thr Ser Asp Thr Gly Ser Leu Pro Pro Asn Leu Gln Pro Gly Tyr Ser
224          260          265          270
225 Pro Ser Pro Thr His Pro Pro Thr Gly Gly Tyr Thr Leu Phe Pro Leu
226          275          280          285
227 Pro Pro Thr Leu Pro Thr Pro Val Val Gln Leu His Pro Leu Leu Pro
228          290          295          300
229 Asp Pro Ser Ala Pro Thr Pro Thr Pro Thr Ser Pro Leu Leu Asn Thr
230          305          310          315          320
231 Ser Tyr Thr His Ser Gln Asn Leu Ser Gln Glu Gly
232          325          330

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234 <210> SEQ ID NO: 8

235 <211> LENGTH: 127

236 <212> TYPE: PRT

237 <213> ORGANISM: Homo sapiens

238 <400> SEQUENCE: 8

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239 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val
240      1          5          10          15
241 Asn Ala Ile Gln Glu Ala Arg Arg Leu Asn Leu Ser Arg Asp Thr
242          20          25          30
243 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp
244          35          40          45
245 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln
246          50          55          60
247 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met

```

VERIFICATION SUMMARY

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